

**Summary of Proposed  
Amendments to the Tables of Maximum  
Incremental Reactivity (MIR) Values**

**Reactivity Research Advisory Committee  
December 3, 2003  
Sacramento, California**



---

---

---

---

---

---

---

**Aerosol Coating Products  
Regulation**

- Board Approved Amendments to the Aerosol Coating Products Regulation on June 22, 2000
  - Also Approved New Subchapter Containing Maximum Incremental Reactivity (MIR) Values
- Legally Effective on July 18, 2001
- Established Reactivity Limits for 36 Coating Categories Based on MIR Scale

2

---

---

---

---

---

---

---

**Board Directive to Executive Officer**

- Review MIR Values 18 Months after Effective Date of Amendments
  - And Every 18 Months Thereafter
  - Make Revisions If Necessary
- Directed Amendments to Update the Tables of MIR Values to Be Conducted through An Executive Officer Public Hearing

3

---

---

---

---

---

---

---

## Why Propose to Amend MIR Values?

- Board Resolution Directs Us to Review the Tables Every 18 Months.
- Initial Assessment Indicates Some of MIR Values Have Changed Non-Negligibly.
- Over 100 VOCs Have Been Added to the SAPRC Mechanism as well as the MIR Tabulation.
- Ensure Continuous Use of “Best Science” in Regulations.
- Staff Determined That the Update Is Appropriate.

4

---

---

---

---

---

---

---

## Scientific Basis for the Proposal

- Existing MIR Values Reviewed by Dr. Carter
  - No Major Revisions on the SAPRC99 Mechanism and the Reactivity Calculation Scenarios or Procedures
  - Slight Corrections or Modifications to Some Mechanisms, Emissions Assignments, and Files and Software Programs
- Over 100 New Compounds or Mixtures Added
- 23 Compounds whose MIR Values have changed non-negligibly.

5

---

---

---

---

---

---

---

## Scientific Peer Review

- Required by Health and Safety Code
  - Section 57004
- Reactivity Scientific Advisory Committee
- The Committee Reviewed and Approved of the Scientific Basis for the Proposal

6

---

---

---

---

---

---

---

## Section 94700

- Add 102 New Compounds or Mixtures
  - A Total of 787 VOCs or Mixtures
- Amend only the MIR Values that Have Changed by at Least 5 Percent
  - A Total of 14 VOCs
- Continued Use of Upper Limit Estimates Recommended
- Add a New Column (New MIR Value [Effective Date])

7

---

---

---

---

---

---

---

## Section 94701

- Staff Reviewed the Bin Values and Found That No Changes to the Bin Values for the Hydrocarbon Solvents Are Necessary.
  - No New Solvents Were Added to the List
  - Impacts on the Bin System Are Negligible

8

---

---

---

---

---

---

---

## Environmental Impacts

- A list of VOCs Proposed for Addition Sent to the Aerosol Coating Industry
- Six VOCs Identified as Appropriate for Potential Future Use in Aerosol Coatings
- Neutral or Slightly Positive Impacts
- Slight Reduction in Tropospheric Ozone Concentrations

9

---

---

---

---

---

---

---

## Economic and Other Impacts

- Minimal or No Economic Impacts
- Existing Products
- Other Reactivity-Based Regulations
  - Low-Emission Vehicle/Clean Fuel Regulation
  - Future Reactivity-Based Regulations for Other Source Categories
- Environmental Justice

10

---

---

---

---

---

---

---

## Summary

- The Proposal Would Help ARB Ensure That the ARB's Reactivity-Based Regulations Are Based on the Most Up-to-Date Science.
- The Proposal Would Provide More Flexibility to the Aerosol Coating Manufacturers.

11

---

---

---

---

---

---

---

## Recommendation

- Staff Recommends That the Executive Officer Adopt the Proposed Amendments to the Tables of MIR Values.

12

---

---

---

---

---

---

---